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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,501	05/04/2001	Elias Bjarnason	CX97002USR	8697

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EXAMINER

BAYARD, EMMANUEL

ART UNIT PAPER NUMBER

2631

DATE MAILED: 07/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,501

Applicant(s)

BJARNASON ET AL.

Examiner

Emmanuel Bayard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12, 13, 16-24, 26 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-11, 14, 15, 28 and 29 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed on 9/15/03 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered. Form 1449 does not list all the art cited in the patent.

Reissue Applications

1. This application is objected to under 37 CFR 1.172(a) as lacking the written consent of all assignees owning an undivided interest in the patent. The consent of the assignee must be in compliance with 37 CFR 1.172. See MPEP § 1410.01.

A proper assent of the assignee in compliance with 37 CFR 1.172 and 3.73 is required in reply to this Office action.

2. This application is objected to under 37 CFR 1.172(a) as the assignee has not established its ownership interest in the patent for which reissue is being requested. An assignee must establish its ownership interest in order to support the consent to a reissue application required by 37 CFR 1.172(a). The assignee's ownership interest is established by:

(a) filing in the reissue application evidence of a chain of title from the original owner to the assignee, or

(b) specifying in the record of the reissue application where such evidence is recorded in the Office (e.g., reel and frame number, etc.).

The submission with respect to (a) and (b) to establish ownership must be signed by a party authorized to act on behalf of the assignee. See MPEP § 1410.01.

An appropriate paper satisfying the requirements of 37 CFR 3.73 must be submitted in reply to this Office action.

3. This application is objected to under 37 CFR 1.172(a) as the assignee has not established its ownership interest in the patent for which reissue is being requested. An assignee must establish its ownership interest *in order to support the consent to a reissue application required by 37 CFR 1.172(a)*. The submission establishing the ownership interest of the assignee is informal. There is no indication of record that the party who signed the submission is an appropriate party to sign on behalf of the assignee. 37 CFR 3.73(b).

A proper submission establishing ownership interest in the patent, pursuant to 37 CFR 1.172(a), is required in response to this action.

4. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

According to PALM, there was an assignment made and recorded in the Office whereby the inventors assigned their rights to Rockwell International Corporation. Then the inventors again assigned rights to Rockwell Semiconductor Systems, Inc. However, there is no record of Rockwell International Corporation reassigning rights back to the inventors. Also the 3.73(b) statement left blank the serial number of the application as well as ownership and interest of the appropriate Assignee. It appears as though there was evidence submitted showing assignment from the inventors to Rockwell Semiconductor System, Inc. However, the 3.73(b) and consent to reissue was signed by an officer at Conexant Systems, Inc. No evidence was presented which

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established a connection between Conexant Systems, Inc. and Rockwell Semiconductor Systems, Inc. Therefore, both the consent and the 3.73(b) are defective. In addition there is another assignment of record in the office which records assignment from Conexant Systems, Inc. to PCTEL, Inc. Therefore, a new consent and 3.73(b) are required, but must be provided by the actual/current assignee.

Drawings

There is a request for transfer drawings in the application. However the office no longer transfers drawings. Quality photocopies from the issued patent are sufficient.

Response to Amendment

The "clean copy" of amendment filed on 9/14/03 will not be entered because it does not comply with rule § 1.173 (b).

Claim Objections

5. Claim 25 is objected to because of the following informalities: in line 1, the subject matter "the PCM modem" is disclosed. However claim 24, which claim 25 depended on, does not show the word "modem". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11, 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said line coder" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the transfer function" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the spectrum" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the transfer function" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the transfer function" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-3, 6-9, 11, 15 are likewise rejected because they depend on a base rejected claims.

Reissue Applications

6. Claim 28 is rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously

surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

Applicants surrendered the original version of claim 12 when they added the limitation of claim 15 into 12 to advance prosecution. Applicant can have a broader version of the limitation added via claim 15, but there has to be some version present in claim 28. Instead, it appears as though Applicants are trying to narrow other limitations while deleting in entirety the added limitation. This is improper recapture

Claim 29 rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

Applicants surrendered the original version of claim 12 when they added the limitation of claim 15 into 12 to advance prosecution. Applicant can have a broader version of the limitation added via claim 15, but there has to be some version present in claim 28. Instead, it appears as though Applicants are trying to narrow other limitations while deleting in entirety the added limitation. This is improper recapture.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ayanoglu et al U.S. Patent No RE37,569 E teaches a high speed modem.

Chung U.S. Patent No 4,995,057 discloses a technique for achieving the theoretical gain of digital signals incorporating error correction.

Blackwell et al U.S. Patent No 5,598,401 teaches an apparatus and method for a digital data communications device.

Moran, III et al U.S. Patent No 5,870,429 teaches an apparatus method, and software modem.

Eyuboglu et al U.S. Patent no 6,198,776 B1 teaches a device and method for precoding.

Townshend U.S. Patent No 5,809,075 teaches a high speed communications system.

Stuart U.S. Patent No 4,489,416 teaches an equalization system.

Larsson et al U.S. Patent 5,694,423 teaches a method and apparatus for detecting and correcting misconvergence of a blind equalizer.

Lanberg U.S. Patent No 5,732,112 teaches a channel training.

Moran, III; John L. Et al U.S. Patent No 5,463,661 teaches a TX preemphasis filter.

Bremer et al U.S. Patent No 5,661,718 teaches a simultaneous analog and digital communication.

Marchetto et al U.S. Patent No 5,666,378 teaches a high performance modem.

Gray U.S. Patent No 5,677,951 teaches an adaptive filter.

Finn U.S. Patent No 5,706,344 teaches an acoustic echo cancellation.

Haneda et al U.S. Patent No 5,721,772 teaches a subband acoustic echo canceler.

Allen U.S. Patent No 5,737,389 teaches a technique for determining a compression of ratio.

Vahatalo et al U.S. Patent No 5,737,410 teaches a method for determining the location of echo.

Hayashi U.S. Patent No 5,740,242 teaches an echo canceler.

Hulyalkar et al U.S. Patent No 5,761,088 teaches a method and apparatus for channel identification.

Rahamim et al U.S. Patent No 5,764,694 teaches a self-testing and evaluation system

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 703 308-9573. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 703 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Emmanuel Bayard
Primary Examiner
Art Unit 2631


**EMMANUEL BAYARD
PRIMARY EXAMINER**